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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/763,845

02/27/2001

Christoph Herrmann

PHD 99,088

5206

24737

7590

04/08/2009

PHILIPS INTELLECTUAL PROPERTY & STANDARDS

P.O. BOX 3001

BRIARCLIFF MANOR, NY 10510

EXAMINER

AHN, SAM K

ART UNIT

PAPER NUMBER

2611

MAIL DATE

DELIVERY MODE

04/08/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/763,845	<b>Applicant(s)</b> HERRMANN ET AL.	
	<b>Examiner</b> SAM K. AHN	<b>Art Unit</b> 2611	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 December 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 14-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14-25, 34, 35, 38 and 39 is/are allowed.
- 6) ☒ Claim(s) 26-33, 36, 37 and 40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. In view of the appeal brief filed on 12/29/08, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

***/Mohammad H Ghayour/***

***Supervisory Patent Examiner, Art Unit 2611***

### ***Response to Amendment***

2. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

***Response to Arguments***

3. Applicant's arguments, see p.6-8, filed 07/01/08, with respect to 103(a) rejection have been fully considered and are persuasive. The rejection of claims 14-25,34,35,38 and 39 has been withdrawn.
4. Applicant's arguments filed 07/01/08 have been fully considered but they are not persuasive. Regarding claims 26-33,36,37 and 40, the independent claims 26 and 33 do not recite wherein the provision message indicating a channel that is available to the plurality of terminals for contention-based access, as asserted by the applicants. Rather, claims 26 and 33 recite wherein the channel is available to the terminal.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 26-28, 32-33,36,37 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanterakis (cited previously) in view of Suzuki et al. (Suzuki).

Regarding claims 26 and 33, Kanterakis teaches a method and apparatus of a wireless network comprising a base station and a plurality of terminals each having its respective transmitter and receiver (see Fig.1) for exchanging user data and control data (see Fig.7) over a contention channel wherein Kanterakis

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teaches a common-packet channel is a contention based, therefore teaches a contention channel. (note col.2, lines 56-63) Further, Kanterakis teaches in the base station a device for correlating by a matched filter (315 in Fig.3) a signaling sequence transmitted by at least one terminal to indicate the wish to use a contention channel (access-burst signal, note col.5, lines 63-67) and for detecting the pulse evolved from a received and correlated signaling sequence (see Fig.6 and note col.6, lines 37-46). And further, in that the base station, after the detection of the signaling sequence (access-burst signal), is provided for transmitting a provision message (ACK signal, note col.6, lines 47-52) over a contention channel (common-synchronization channel) to be used by the assigned terminal.

However, Kanterakis does not teach wherein the terminals are assigned to the base station. Suzuki teaches correlation of received signaling sequence by an assigned terminal, assigned to a host terminal operating in a wireless network environment. (see Fig.12 and note col.2, line 25- col.4, line 35 and col.10, lines 44-61) Therefore, it would have been obvious to one skilled in the art at the time of the invention to implement Kanterakis' teaching by assigning the terminals to be assigned to a base station for the purpose of supporting a wireless network environment where the terminals are assigned to the host terminal functioning as a base station.

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Regarding claim 27, Kanterakis in view of Suzuki teach all subject matter claimed, as applied to claim 26. Kanterakis further teaches a terminal provided for transmitting a signaling sequence during a certain time slot (note col.11, lines 40-57) of a transmitting-end reference frame, and after receiving a provision message (ACK signal) from the base station, for transmitting a terminal identification data packets over at least one contention channel. (note col.9, lines 31-45)

Regarding claim 28, Kanterakis in view of Suzuki teach all subject matter claimed, as applied to claim 14 or 26. Kanterakis further teaches a terminal provided for transmitting a Gold, Kasami or Golay sequence (col.8, lines 24-40) as a signaling sequence during a specific time slot of a transmitting-end reference frame. (note col.11, lines 40-57)

Regarding claim 32, Kanterakis teaches all subject matter claimed, as applied to claim 26. Kanterakis further teaches a terminal provided for transmitting a signaling sequence during one of various determined time slots (note col.11, lines 40-57) of a transmitting-end reference frame, and after receiving a provision message (ACK signal) from the base station, for transmitting a terminal identification data packets over at least one contention channel. (note col.9, lines 31-45) Furthermore, it is inherent that the terminal transmits the terminal identification only when the provision message indicates the respective time slot.

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As previously explained, the provision message includes the time slot information and therefore, transmitting the terminal identification would only occur after the reception of the provision message.

Regarding claims 36 and 37, Kanterakis in view of Suzuki teaches all subject matter claimed, as applied to claim 26 or 33, and although does not explicitly teach the further limitation of registering the terminal to the radio cell in response to the registration request, this is a well-known steps performed in a wireless communication system in order to provide service to the terminal. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to recognize that the system of Kanterakis in view of Suzuki performs the recited steps for the purpose of providing service to the terminal.

Regarding claim 40, Kanterakis in view of Suzuki teaches all subject matter claimed, as applied to claim 33, and although does not explicitly teach the further limitation of wherein the channel is available for contention based access for a limited time period, it would have been obvious to one skilled in the art at the time the invention was made as this is a well-known step performed in a wireless communication system in order to provide service to the terminal. Furthermore, having the channel to the terminal for unlimited time would freeze up the channel preventing other terminal from using. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to recognize that the

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system of Kanterakis in view of Suzuki performs the recited step for the purpose of providing service to the terminal and freeing the channel for other terminals when not in use.

6. Claims 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanterakis (cited previously) in view of Suzuki et al. (Suzuki) and Jung et al. (cited previously).

Regarding claims 29 and 30, Kanterakis in view of Suzuki teach all subject matter claimed, as applied to claim 26. Kanterakis teaches retransmission of signaling sequence, however, does not teach retransmission within a predefined period of time when no acknowledgement of the reception of the signaling sequence. Jung teaches, in the same field of endeavor, communication between base station and terminal over a contention channel wherein, prior to receiving the provision message, the terminal retransmits signaling sequence within a predefined period of time when no acknowledgement of the reception of the signaling sequence. (note col.1, lines 37-46) Therefore, it would have been obvious to one skilled in the art at the time of invention to implement Jung's teaching of retransmission when no acknowledgement has been received since the terminal cannot wait for too long period of time, nor could terminal retransmit when base station has already received the signaling sequence, as it may be an unnecessary transmission. For the purpose of designing an efficient system, one



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skilled in the art may implement as such wherein the terminal waits for a predefined period of time before retransmitting.

Regarding claim 31, Kanterakis in view of Suzuki teach all subject matter claimed, as applied to claim 26. Kanterakis further teaches increasing energy or power level for transmission. (note col.6, lines 1-19) However, Kanterakis does not explicitly disclose increase of transmission energy or power level to a maximum level within a predefined period of time when no acknowledgement of the reception of the signaling sequence has been received from the base station. Jung teaches this limitation. (note col.2, lines 4-10) Therefore, it would have been obvious to one skilled in the art at the time of invention to implement as such for the purpose of properly transmitting the signaling sequence to the base station in situations where the terminal may be distant from the base station wherein increase of power level is needed in order for the base station to receive the sequence and further resulting in reception of acknowledgement of reception of signaling sequence by the terminal.

***Allowable Subject Matter***

7. Claims 14-25,34,35,38 and 39 are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Ahn whose telephone number is (571) 272-3044. The examiner can normally be reached on Monday-Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ghayour can be reached on (571) 272-3021. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Sam K. Ahn/  
Primary Examiner, Art Unit 2611

4/7/2009